AMENDMENT TO THE CLAIMS

Please amend claims 2 and 7 as shown in the following list of claims:

1. (Original) A method of identifying a coded test unit in a plurality of coded test units comprising the step of:

contacting the coded test unit with a decoding oligonucleotide comprising an orthogonal nucleobase under conditions in which the decoding oligonucleotide produces a detectable hybridization signal sufficient to distinguish the coded test unit from the remainder of the plurality of coded test units.

2. (Currently Amended) A method for decoding a plurality of coded test units comprising the steps of:

a. identifying a first molecule in the plurality of coded test units ~~according to the method of Claim 1~~; and

b. identifying a second molecule in the plurality of coded test units;

wherein the first molecule and the second molecule are identified according to the method of Claim 1.

3. (Original) The method of Claim 1 wherein the coded test unit is coded with a decoding oligonucleotide comprising an orthogonal nucleobase.

4. (Original) The method of Claim 1 wherein the plurality of coded test units are coded with decoding oligonucleotides, wherein each decoding oligonucleotide independently comprises an orthogonal nucleobase.

5. (Original) The method of Claim 1, 2, 3 or 4 wherein the orthogonal nucleobase is iso-C, iso-G, K, X or H.

6. (Original) The method of Claim 1 wherein the coded test unit comprises a solid substrate.

7. (Currently Amended) A method for decoding a plurality of coded substrates comprising the steps of:

a. identifying a first substrate in the plurality of coded substrates ~~according to the method of Claim 6~~; and

b. identifying a second substrate in the plurality of coded substrates;

wherein the first substrate and the second substrate are identified according to the method of Claim 6.

8. (Original) The method of Claim 6 wherein each coded substrate comprises a test moiety.

9. (Original) The method of Claim 8 wherein the test moiety is an oligonucleotide.

10. (Original) The method of Claim 9 wherein a single polynucleotide comprises the test moiety and the coding oligonucleotide.

11. (Original) The method of Claim 9 wherein a first polynucleotide comprises the test moiety and a second polynucleotide comprises the coding oligonucleotide.

12. (Original) The method of Claim 6 wherein the plurality of coded substrates is in an array.